Part 6 - Mathematical Library Methods

I)Objective Type Questions:

1. What is the output of the following Math function?
   Math.floor(-7.7)

   A) 8.0
   B) 7.0
   C) -7.0
   D) -8.0

2. What is the output of the following Math function?
   Math.ceil(5.4) + Math.ceil(4.5)

   A) 9.0
   B) 10.0
   C) 11.0
   D) 12.0

3. What is the output of the following Math function?
   Math.ceil(-5.4) + Math.ceil(-4.5)

   A) -9.0
   B) -10.0
   C) 9.0
   D) 10.0

4. What is the output of the following Math function?
   Math.abs(Math.min(-2.84, -6.54))

   A) -2.84
   B) -6.54
   C) 2.84
   D) 6.54

5. What is the output of the following Math function?
   Math.sqrt(Math.floor(25.9))

   A) 25.0
   B) 5.0
   C) 26.0
   D) 6.0

6. What is the output of the following Math function?

Math.ceil(4.5 + 4.4)

A) 8.0
B) 9.0
C) 10.0
D) Runtime error

7. What is the output of the following expression?
Math.round(Math.abs(-0.5))

A) **1**
B) -1
C) 0
D) Runtime error

8. Which package includes the Math class?
A) Java.math
B) Java.util
C) Java.lang
D) Java.io

9. Which package is imported by default in a Java program?
A) Java.math
B) Java.util
C) Java.lang
D) Java.io

10. Which statement is correct?
Math.random() returns a:
A) double value greater than or equal to 0.0 and less than 1.0
B) int value greater than or equal to 0 and less than 1
C) double value greater than or equal to 0.0 and less than or equal to 1.0
D) int value greater than or equal to 0 and less than or equal to 1

11. What will be the output of Math.cbrt(-64)?
A) **-4.0**
B) 4.0
C) 0.0
D) Runtime error – we cannot use a negative number

12. What will be the output of Math.pow(-1, 0)?
A) -1.0
B) 1.0
C) 0.0
D) Runtime error – we cannot use a negative number

13. Which of the following is a method to find the cube root of a number?
    A) cubeRoot(x)
    B) Cbrt(x)
    C) Math.cubeRoot(x)
    D) Math.cbrt(x)

14. Which of the following is true for Math.round() method?
    A) If the argument type is double, the return type is long.
    B) If the argument type is float, the return type is int.
    C) The method returns the closest int or long.
    D) All of the above are true.

15. What will be the output of Math.abs(-3.1)?
    A) -3.1
    B) 3.0
    C) 3.1
    D) -3.0